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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/656,560	09/05/2003	Alexander Talalai	SPIRP002	7867

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EXAMINER	
TIEU, BINH KIEN	
ART UNIT	PAPER NUMBER
2614	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/14/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/656,560	TALALAI, ALEXANDER	
	Examiner	Art Unit	
	BINH K. TIEU	2614	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-19* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see Applicant's remarks, filed 12/19/2006, with respect to the rejection(s) of claim(s) 1-19 under 102 rejections and 103 rejections have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Tsai et al. (US. Pat. #: 6,504,905).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-2, 4-5, 14-15 and 17-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Tsai et al. (US. Pat. #: 6,504,905).

Regarding claim 1, Tsai et al. ("Tsai") teaches a method for testing a quality of communication data received from a system under test (SUT), comprising the operation of:

storing a reference test data comprising a plurality of data segments (col.3, line 63 through col.4, line 4);

receiving degraded test data from the SUT, the received degraded test data comprising a plurality of data segments (i.e., voice segments, col.4, lines 24-27)

locating the data segments in the degraded test data to related data segments in the reference test data (col.4, lines 34-39);

corresponding data segments in the degraded test data to related data segments in the reference test data (col.4, lines 40-48); and

comparing the data segments in the degraded test data to corresponding data segments in the reference test data using a fixed point operation (col.4, lines 48-59).

Regarding claims 2 and 4-5, note col.4, line 59 through col.5, line 43.

Regarding claim 14, Tsai teaches a computer program embodied on a computer readable medium for testing a quality of communication data received from a system under test (SUT), comprising the operation of:

program instructions that store reference test data comprising a plurality of data segments (col.3, line 63 through col.4, line 4);

program instructions that receive degraded test data from the SUT, the received degraded test data comprising a plurality of data segments (i.e., voice segments, col.4, lines 24-27)

program instructions that locate the data segments in the degraded test data to related data segments in the reference test data (col.4, lines 34-39);

program instructions that correspond data segments in the degraded test data to related data segments in the reference test data (col.4, lines 40-48); and

program instructions that compare the data segments in the degraded test data to corresponding data segments in the reference test data using a fixed point operation (col.4, lines 48-59).

Regarding claim 15 and 17-18, note col.4, line 59 through col.5, line 43.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 3 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. (US. Pat. #: 6,504,905) in view of Cabot (US. Pat. #: 5,649,304 ***as cited in the previous Office Action***).

Regarding claim 3 and claim16, Tsai teaches all subject matters as claimed above, except for the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency. However, Cabot teaches such well-known Fast Fourier Transform (FFT) in col.5, line 61 through col.6, line 22 for a purpose of analyzing the test signal measurements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency, Cabot into view of Tsai in order to analyze the measurements of the speech signal generated by a device under test.

6. Claims 6-10, 12-13 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. (US. Pat. #: 6,504,905) in view of Quan et al. (Pub. No.: US 2004/0193974 ***also cited in the previous Office Action***).

Regarding claims 6-7 and claim 19, Tsai teaches all subject matters as claimed above, except for the Perceptual evaluation signal quality (PESQ) result and quality of service (QoS) data files. However, Quan et al. (Quan) teaches such features paragraphs [0029] and [0040] for a purpose of testing the capability of a packet-switched network for handling the unique requirements of voice transmission.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the Perceptual evaluation signal quality (PESQ) result and quality of service (QoS) data files, as taught by Quan, into view of Tsai in order to test telecommunications equipment for sound quality.

Regarding claim 8, Tsai teaches all subject matters as claimed above, except for an encoder for encoding the reference test data; and a decoder for decoding the degraded test data. However, Quan teaches such features in figures 2 and 4, paragraphs [0019]-[0027] and [0033]-[0039] for a purpose of testing voice transmission and voice quality.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the encoder for encoding the reference test data; and the decoder for decoding the degraded test data, as taught by Quan, into view of Tsai in order to test the voice quality on the voice transmission line or channel.

Regarding claim 9, Tsai further teaches limitations of the claim in col.4, lines 34-39.

Regarding claim 10, Tsai further teaches limitations of the claim in col.4, lines 40-48.

Regarding claims 12-13, Tsai further teaches limitations of the claim in col.4, line 59 through col.5, line 43.

7. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tsai et al. (US. Pat. #: 6,504,905) in view of Quan et al. (Pub. No.: US 2004/0193974) and further in view of Cabot (US. Pat. #: 5,649,304).

Regarding claim 3, Tsai and Quan, in combination, teaches all subject matters as claimed above, except for the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency. However, Cabot teaches such well-known Fast Fourier Transform (FFT) in col.5, line 61 through col.6, line 22 for a purpose of analyzing the test signal measurements.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the use of the features of the well-known Fourier Transform technique for separating the waveform into sinusoids of different frequency, Cabot into view of Tsai and Quan in order to analyze the measurements of the speech signal generated by a device under test.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Binh K. Tieu whose telephone number is (571) 272-7510 and E-mail address: BINH.TIEU@USPTO.GOV.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Curtis Kuntz, can be reached on (571) 272-7499 and **IF PAPER HAS BEEN**

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BINH TIEU
PRIMARY EXAMINER

Technology Division 2614

Date: February 06, 2007